

Comparisons of Job Characteristics

Focus Occupation: Nuclear Technicians (19-4051)

Associated Occupation: Nuclear Power Reactor Operators (51-8011)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Nuclear Technicians (19-4051)

Associated Occupation: Nuclear Power Reactor Operators (51-8011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Physics	4.3	14.5	12.7	< Expanded education and/or training may be required
Engineering and Technology	5.7	10.7	9.8	0 Current knowledge level may be sufficient
Chemistry	4.8	10.4	10.9	0 Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Nuclear Technicians (19-4051)

Associated Occupation: Nuclear Power Reactor Operators (51-8011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operation Monitoring	6.6	13.7	13.6	0 Current skill level may be sufficient
Monitoring	9.9	13.2	12.7	0 Current skill level may be sufficient
Operation and Control	5.4	12.7	10.3	< A higher skill level may be required
Quality Control Analysis	5.9	9.3	9.6	0 Current skill level may be sufficient
Troubleshooting	4.5	8.5	9.0	0 Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Nuclear Technicians (19-4051)
Associated Occupation: Nuclear Power Reactor Operators (51-8011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Problem Sensitivity	11.1	14.8	13.7	0	Current ability level may be sufficient
Near Vision	11.1	12.8	12.6	0	Current ability level may be sufficient
Perceptual Speed	7.4	12.5	11.9	0	Current ability level may be sufficient
Selective Attention	8.7	10.8	13.2	>	Current ability level is likely sufficient
Time Sharing	6.6	10.2	9.1	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	9.0	9.2	0	Current ability level may be sufficient
Auditory Attention	5.9	8.7	9.9	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Nuclear Technicians (19-4051)
Associated Occupation: Nuclear Power Reactor Operators (51-8011)

Work Activities	Exclusivity of Activity
Adjust production equipment/machinery setup	25
Ensure prescribed safe radiation levels are maintained	89
Operate nuclear power equipment	99
Read technical drawings	7
Understand technical operating, service or repair manuals	6

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Nuclear Technicians (19-4051)
Associated Occupation: Nuclear Power Reactor Operators (51-8011)

Tools and Technologies	Exclusivity
Cameras	2
Compressors	9
Computers	1
Content authoring and editing software	1
Data management and query software	1
Dosimetry equipment	43

Fission fuel assemblies	90
Hot cell devices	90
Indicating and recording instruments	2
Non destructive examination equipment	13
Nuclear evaluation instruments	51
Nuclear reactor equipment	80
Personal communication devices	2
Radioactive waste equipment	90
Respiratory protection	6
Safety apparel	4
Safety footwear	21
Sampling equipment	12
Viewing and observing instruments and accessories	4
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.